# Benq

FP222W 22" Wide-Screen LCD Monitor User Manual

# Welcome

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# Please follow these safety instructions for best performance, and long life for your monitor

# Power Safety

- The AC plug isolates this equipment from the AC supply.
- The power supply cord serves as a power disconnect device for pluggable equipment. The socket outlet should be installed near the equipment and be easily accessible.
- This product should be operated from the type of power indicated on the marked label. If you are not sure of the type of power available, consult your dealer or local power company.

# Care And Cleaning

- Cleaning. Always unplug your monitor from the wall outlet before cleaning. Clean the LCD monitor surface with a lint-free, non-abrasive cloth. Avoid using any liquid, aerosol or glass cleaners.
- Slots and openings on the back or top of the cabinet are for ventilation. They must not be blocked or covered. Your monitor should never be placed near or over a radiator or heat source, or in a built-in installation unless proper ventilation is provided.
- Never push objects or spill liquid of any kind into this product.

# Servicing

• Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltages or other risks. If any of the above mentioned misuse or other accident such as dropping or mishandling occurs, contact qualified service personnel for servicing.

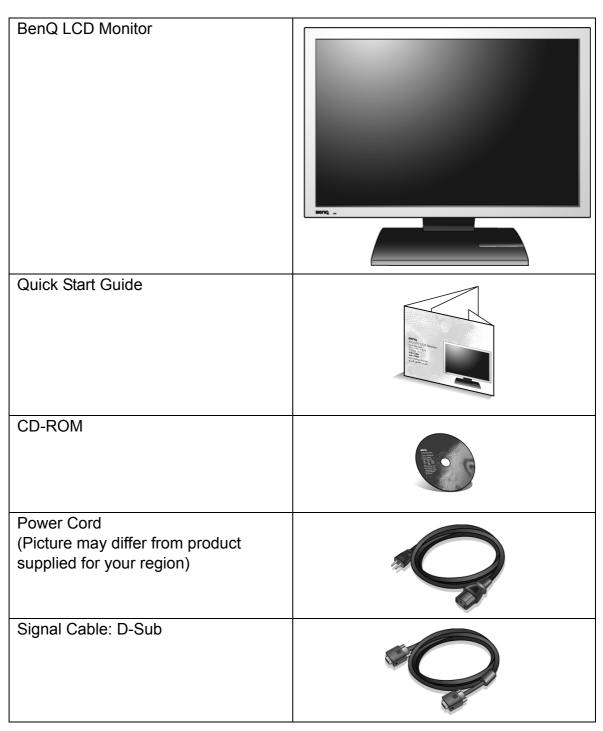
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# 1. Getting started

Your FP222W will provide the optimal display performance of the video resolution standard of 1680 x 1050. Please ensure that your graphic card supports the resolution of 1680 x 1050.

When unpacking please check you have the following items. If any are missing or damaged, please contact the place of purchase for a replacement.





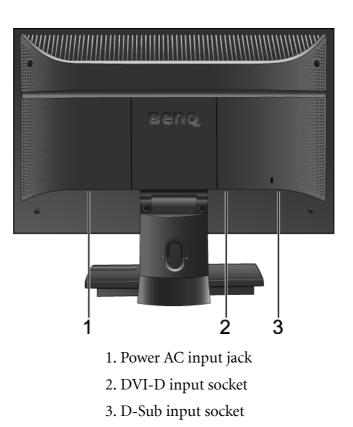
 $\sum_{i=1}^{n}$  Consider keeping the box and packaging in storage for use in the future when you may need to transport the monitor. The fitted foam packing is ideal for protecting the monitor during transport.

# 2. Getting to know your monitor

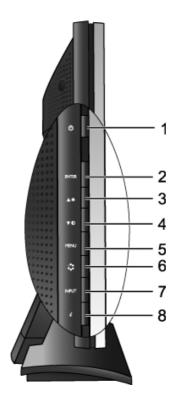
### Front view



### Back view



### Left-side view



- 1. Power
- 2. Enter
- 3. / Brightness
- 4. ▼ / Contrast
- 5. MENU
- 6. Mode
- 7. Input
- 8. *i* key

# 3. How to assemble your monitor hardware

- If the computer is turned on you must turn it off before continuing.Do not plug-in or turn-on the power to the monitor until instructed to do so.
- 1. Attach the monitor base.
- Please be careful to prevent damage to the monitor. Placing the screen surface on an object like a stapler or a mouse will crack the glass or damage the LCD substrate voiding your warranty. Sliding or scraping the monitor around on your desk will scratch or damage the monitor surround and controls.

Protect the monitor and screen by clearing a flat open area on your desk and placing a soft item like the monitor packaging bag on the desk for padding.

Gently lay the screen face down on a flat clean padded surface.

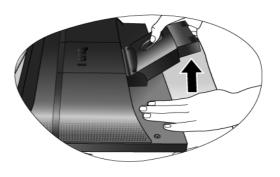
While holding the monitor firmly against the desk, pull the monitor stand arm upwards clear of the monitor.

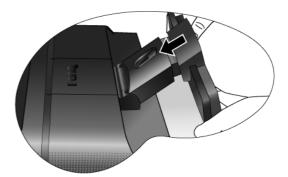
Orient and align the stand base socket with the end of the stand arm, then push them together until they click and lock into place.

Gently attempt to pull them back apart to check that they have properly engaged.

Carefully lift the monitor, turn it over and place it upright on its stand on a flat even surface.

You should position the monitor and angle the screen to minimize unwanted reflections from other light sources.







- 2. Connect the PC video cable.
- Do not use both DVI-D cable and D-Sub cable on the same PC. The only case in which both cables can be used is if they are connected to two different PCs with appropriate video systems.

Connect one end of the DVI-D cable to the monitor DVI-D socket and the other end to the DVI-D port on your computer. (optional)

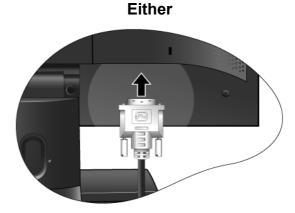
The DVI-D format is used for direct digital connection between source video and digital LCD monitors or projectors. The digital video signals produce a superior quality picture than analog video signals.

Connect the plug of the D-Sub cable (at the end without the ferrite filter) to the monitor D-Sub socket. Connect the other plug of the D-Sub cable (at the end with the ferrite filter) to the computer video D-Sub socket.

Tighten all finger screws to prevent the plugs from accidently falling out during use.

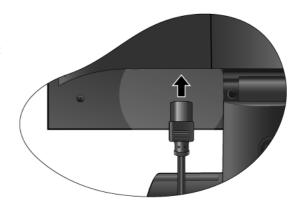
3. Connect the power cable to the monitor.

Plug one end of the power cord into the socket labelled 'POWER IN' on the rear of the monitor. Do not connect the other end to a power point just yet.



Or





4. Route the cables via the cable clip.

Release the cable retaining clip by squeezing the clip inwards as illustrated. Position the cables together and reinsert the clip over them to retain the cables neatly in place behind the monitor stand.

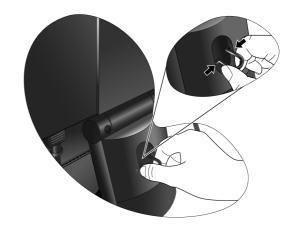
5. Connect the power cable to a wall power outlet and press **Power** on the monitor.

Plug the other end of the power cord into a power outlet and turn it on.

Picture may differ from product supplied for your region.

Turn on the monitor by pressing the power button located at the top of the row of buttons on the left edge of the monitor.

Turn on the computer too, and follow the instructions in Section 4: **Getting the most from your BenQ monitor on page 14** to install the monitor software.









### How to detach the stand base

1. Prepare the monitor and area.

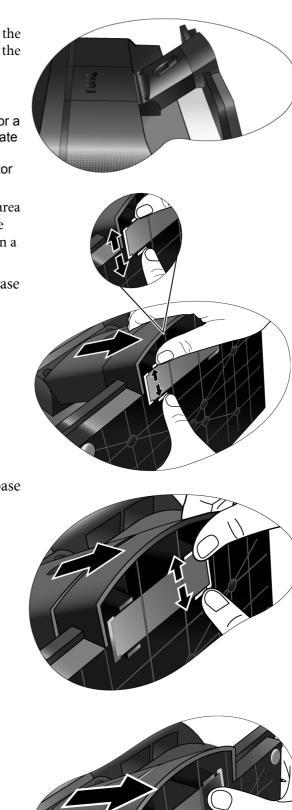
Turn off the monitor and the power before unplugging the power cable. Turn off the computer before unplugging the monitor signal cable.

Please be careful to prevent damage to the monitor. Placing the screen surface on an object like a stapler or a mouse will crack the glass or damage the LCD substrate voiding your warranty. Sliding or scraping the monitor around on your desk will scratch or damage the monitor surround and controls.

Protect the monitor and screen by clearing a flat open area on your desk and placing a soft item like a towel on the desk for padding, before laying the screen face down on a flat clean padded surface.

2. Release the locking clip on one side of the stand base while pulling the edge of the base away from the stand arm.

3. Release the other locking clip to detach the stand base from the monitor stand arm.



### How to use the monitor wall mounting kit

The back of your LCD monitor has a VESA standard mount with 100mm pattern, allowing the installation of a wall mount bracket. Before starting to install a monitor wall mounting kit, please read the precautions carefully.

### **Precautions:**

- Install your monitor and monitor mounting kit on a wall with flat surface.
- Ensure that the wall material is stable to support the weight of the monitor.
- Turn off the monitor and the power before disconnecting the cables from the LCD monitor.
- 1. Remove the monitor base.

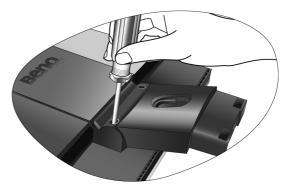
Lay the screen face down on a clean and well-padded surface. Detach the monitor base as instructed in "**How to detach the stand base on page 11**."

2. Remove the monitor stand.

Use a a cross-pointed screwdriver to release the screws that fixing the monitor stand to the monitor.

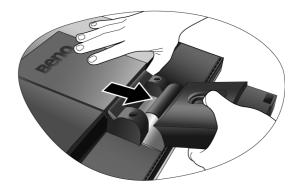
The use of a magnetic-head screwdriver is recommended to avoid of losing the screws.





Then pull the monitor stand backward away from the monitor.

In case you intend to use your monitor on the stand in the future, please keep the monitor base, monitor stand, and screws somewhere safe for future use.



3. Remove the rear cover.

Slide the rear cover back toward you to remove it. The screw plate at the back of the monitor could be revealed.

- 4. Follow the instruction manuals of the wall mount bracket you purchased to complete the installation.

# 4. Getting the most from your BenQ monitor

To gain the most benefit from your new BenQ color LCD flat screen monitor, you should set the graphics card to the native resolution of 1680 x 1050 at first, and then you may start to install the custom BenQ LCD Monitor driver software as provided on the BenQ LCD Monitor CD-ROM.

The circumstances under which you connect and install your BenQ LCD Monitor will determine which process you need to follow to successfully install the BenQ LCD Monitor driver software. These circumstances relate to which version of Microsoft Windows you are using, and whether you are connecting the monitor and installing the software onto a new computer (without existing monitor driver software), or whether you are upgrading an existing installation (which already has existing monitor driver software) with a newer monitor.

In either case however, the very next time you turn on your computer (after connecting the monitor to your computer), Windows will automatically recognise the new (or different) hardware, and will launch its **Found New Hardware** wizard.

Follow the wizard instructions until it asks you to select a monitor model. At that point, click the **Have Disk** button, insert the BenQ LCD Monitor CD-ROM and select the appropriate monitor model. Further details and step-by-step instructions for both an automatic (new) or upgrade (existing) installation follow. See:

- To install the monitor on a new computer on page 15.
- To upgrade the monitor on an existing computer on page 16
- If you require a User Name and Password to login to your Windows computer, you must be logged on as an Administrator or as a member of the Administrators group in order to install the monitor driver software. Furthermore, if your computer is connected to a network which has security access requirements, network policy settings may prevent you from installing software on your computer.

### To install the monitor on a new computer

This instruction details the procedure for selecting and installing the BenQ LCD Monitor driver software on a new computer which has never had a monitor driver installed before. This instruction is only suitable for a computer which has never been used before, and for which the BenQ LCD Monitor is the first ever monitor to be connected to it.

If you are adding the BenQ LCD Monitor to an existing computer that has already had another monitor connected to it (and has monitor driver software installed), you should not be following these instructions. You should instead be following the instructions for To upgrade the monitor on an existing computer on page 16.

- Follow the instructions in How to assemble your monitor hardware on page 8. When Windows (2000 or later) starts, it will automatically detect the new monitor and launch the Found New 222WHardware Wizard. Follow the prompts until it displays the option to Install Hardware Device drivers.
- 2. Insert the BenQ LCD Monitor CD-ROM into a CD drive on the computer.
- 3. Check Search for a suitable driver for my device option, and click Next.
- 4. Check the option for CD-ROM drives (uncheck all others) and click Next.
- 5. Look to confirm that the wizard has selected the correct name of your monitor as "BenQ FP222W" and click **Next**.
- 6. Click Finish.
- 7. Restart the computer.

### To upgrade the monitor on an existing computer

This instruction details the procedure for manually updating the existing monitor driver software on your Microsoft Windows computer. It is currently tested as compatible (and recommended only) for Windows 2000 and Windows XP Operating System (OS).

The BenQ LCD Monitor driver for your model may well function perfectly with other versions of Windows, however, as at the time of writing, BenQ has done no testing of this driver on other versions of Windows and cannot guarantee its operation on those systems.

Installing monitor driver software involves selecting an appropriate information file (.inf) on the BenQ LCD Monitor CD-ROM for the particular model monitor you have connected, and letting Windows install the corresponding driver files from the CD. You need only steer it in the right direction. Windows has an Upgrade Device Driver Wizard to automate the task and guide you through the file selection and installation process.

See:

- To install on Windows XP system on page 17.
- To install on Windows 2000 system on page 19.

### To install on Windows XP system

### 1. Open Display Properties.

The quickest shortcut to **Display Properties** is through the Windows desktop. Right-click the desktop and select **Properties** from the popup menu.

Alternatively, the Windows menu to Display Properties is located in Control Panel.

In Windows XP version, **Control Panel** is located directly under the main **Start** menu item. The menu options displayed will depend upon which type of view is selected for your system.

- Under the Classic view, click Start | Control Panel | Display.
- Under the Category view, click **Start | Control Panel | Appearance and Themes | Change the** screen resolution.

The **Display Properties** window will display.

2. Click the **Settings** tab and the **Advanced** button.

The Advanced Display Properties window will display.

3. Click the Monitor tab and select the 'Plug and Play Monitor' from the list.

If there is only one monitor in the list, it will already be selected for you.

4. Click the **Properties** button.

The Monitor Properties window will display.

If the driver provider is listed as BenQ, and the model matches that of your new monitor, the proper drivers are already installed, and you need do nothing further. Cancel out of these property windows.

However, if BenQ is not listed as the manufacturer, or the correct model is not currently shown, you will need to continue with these instructions.

5. Click the **Driver** tab and the **Update Driver** button.

The Hardware Update Wizard will display. Follow the wizard instructions noting the steps below:

- 6. Insert the BenQ LCD Monitor CD-ROM into a CD drive on the computer you attached the monitor to.
- 7. Check the option 'Install from a list or specific location' and click Next.
- 8. Check the option 'Search for the best driver in these locations' and also check 'Search removable media', then click Next.

Please wait while the wizard searches for drives and the BenQ LCD Monitor CD inserted in step 6. When complete, the wizard should have found and selected the BenQ driver on the CD appropriate to your monitor model, in this case 'BenQ FP222W' in the location 'd:\driver\BenQFP222W.inf' or similar.

The drive letter for your CD drive may differ from the example above depending upon your system – it may be 'D:' or 'E:' or 'F:' etc.

9. Select (single-click) the file named 'BenQ FP222W' on the CD, and click the Next button.

This will copy and install the appropriate monitor driver files to your computer.

10. Click Finish.

This will close the wizard and return you to the **Monitor Properties** window, now renamed **BenQ FP222W Properties**.

### 11. Click Close, OK, and OK.

This will close the **Display Properties** windows. You do not need to restart Windows XP, as the BenQ LCD monitor drivers will operate immediately with no further action required by you.

### To install on Windows 2000 system

You do not need to follow this instruction if you are installing onto a computer which has a Windows XP (or later) version system. In that case, see the instructions at **To install on Windows XP system on page 17**.

### 1. Open Display Properties.

The quickest shortcut to **Display Properties** is through the Windows desktop. Right-click the desktop and select **Properties** from the popup menu.

Alternatively, the Windows menu to Display Properties is located in Control Panel.

In Windows 2000 version, **Control Panel** is located under the **Settings** menu item. Click **Start | Settings | Control Panel | Display**.

The Display Properties window will display.

2. Click the **Settings** tab and the **Advanced** button.

The Advanced Display Properties window will display.

3. In Windows 2000, click the **Monitor** tab and the **Properties** button.

The **Monitor Properties** window will display.

4. In Windows 2000, click the **Driver** tab and the **Update Driver** button.

The Upgrade Device Driver Wizard will display.

See To complete the Windows Upgrade Device Driver Wizard on page 20.

### To complete the Windows Upgrade Device Driver Wizard

1. Load the BenQ LCD Monitor CD-ROM which came with your monitor.

Insert the CD-ROM into a CD drive on the computer you attached the monitor to. The autorun User Guide language selection page will display in your web browser. You can select a language and view the online version of this manual from the next window. You could then print it out for reference if you wish to work off-line. When you're ready, **Cancel** the browser as it is not required for the Windows **Upgrade Device Driver Wizard**.

- 2. Launch the Windows Upgrade Device Driver Wizard and click Next.
- 3. Check the option 'Display a list of known drivers...' and click Next.
- 4. Click the Have Disk button.

The Install From Disk window will display.

5. Click the Browse button and navigate to the BenQ LCD Monitor CD-ROM.

This is the CD you loaded in step 1 above. The CD Drive will have a Windows designated drive letter (like D: or E: or F:). Select the drive letter corresponding to the drive you put the CD into.

6. Double-click the folder labelled 'Driver'.

The contents of the 'Driver' folder will display.

7. Click the **Open** button.

This will return you to the **Install from Disk** window, and it will have entered the address to the BenQ LCD Monitor CD 'Driver' folder into the field titled '**Copy manufacturer's files from:**'. The field will contain something like, "D:\Driver", or "E:\Driver", or "F:\Driver".

8. Click the **OK** button.

This will return you to the Upgrade Device Driver Wizard.

- 9. Select (single-click) the file named BenQ FP222W, and click the Next button.
- 10. Click Next.

This will copy the appropriate monitor driver files to your computer.

11. Click Finish.

On Windows 2000, this will close the wizard and return you to the **Monitor Properties** window, now renamed '**BenQ FP222W Properties**'.

Should you wish to do so, this is where you can change the screen refresh rate and other monitor properties to suit your needs. See **How to adjust the screen refresh rate on page 22** for details.

12. In Windows 2000, click Close.

This will close the **BenQ FP222W Properties** window and return you to the **Advanced Display Properties** window.

13. In Windows 2000, click OK.

This will close the **Advanced Display Properties** window, and return you to the **Display Properties** window.

Should you wish to do so, this is where you can change the screen resolution (area and color). See **How to adjust the screen resolution on page 21** for details.

14. Click OK.

This will close the **Display Properties** window, and if you made any changes to the screen resolution, Windows 2000 will prompt you for confirmation to effect the changes, and further confirmation to accept the changes. Click **OK** and **Yes** respectively.

# 5. How to adjust the screen resolution

Due to the nature of liquid crystal display (LCD) technology, the picture resolution is always fixed. The best possible picture for your FP222W is achieved with a resolution of 1680 x 1050. This is called "Native Resolution" or maximal resolution – that is, the clearest picture. Lower resolutions are displayed on a full screen through an interpolation circuit. Image blurring across pixel boundaries can occur with the interpolated resolution depending upon the image type and its initial resolution.

- To take full advantage of LCD technology you should select the native resolution setting of 1680 x 1050 on your PC screen resolution setting as described below. Be aware that not all PC video cards provide this resolution value. If your doesn't, check with the video card manufacturer's website for an updated driver for your particular model PC video card which supports this resolution. Software video drivers are often updated and available for new hardware video resolutions. If necessary, you may need to replace and update the PC video card hardware to be able to support the native resolution of the monitor.
  - 1. Open **Display Properties** and select the **Settings** tab.

You can open **Display Properties** by right-clicking on the Windows desktop and selecting **Properties** from the pop-up menu.

2. Use the slider in the 'Screen area' section to adjust the screen resolution.

Select the recommended resolution of 1680 x 1050 then click Apply.

If you select some other resolution, be aware that this other resolution is interpolated and may not accurately display the screen image as well as it could do at the native resolution setting.

- 3. Click OK then Yes.
- 4. Close the **Display Properties** window.

# 6. How to adjust the screen refresh rate

You don't have to choose the highest possible refresh rate on an LCD display, because it is not technically possible for an LCD display to flicker. The best results are obtained by using the factory modes already set in your computer. There is a table with the factory modes in the specification section of this Users Manual: **Supported PC Timings on page 37** 

You can choose 60 Hertz for the native resolution of 1680 x 1050.

- 1. Double click the Display icon in Control Panel.
- 2. From the **Display Properties** window, select the **Settings** tab and click the **Advanced** button.
- 3. Select the **Adapter** tab, and select an appropriate refresh rate to match one of the applicable factory modes as listed in the specification table.
- 4. Click Change, OK, then Yes.
- 5. Close the **Display Properties** window.

# 7. Picture optimization

The easiest way to obtain an optimal display from an analog (D-Sub) input is to use the ikey function. Press the ikey to optimize the currently displayed image to the screen.

When you connect a digital video output using a digital (DVI) cable to your monitor, the *i* key and the **Auto Adjustment** function will be disabled, because the monitor will automatically display the best image.

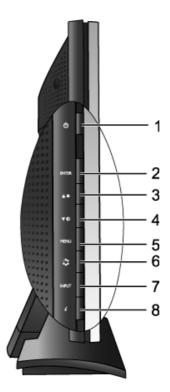
P Please ensure that the connected graphic card on your computer is set to the native resolution of the monitor (1680 x 1050) when you use the *i* key function.

If you wish, you can always adjust the screen geometric settings manually using geometry menu items. To assist you in this endeavour, BenQ has provided a screen test image utility which you can use to check for screen color, grayscale and line gradient display.

- 1. Run the test program auto.exe from CD-ROM. You could also use any other image, such as the desktop of your operating system. However, we recommend that you use auto.exe. As you run auto.exe, a test pattern displays.
- 2. Press the *i*key on the monitor.
- 3. Press the MENU key to access the monitor On-Screen Display (OSD) menu.
- 4. Use the <sup>▲</sup> or <sup>▼</sup> keys to select **DISPLAY** and press the **ENTER** key to enter the menu.
- 5. If you notice a vertical noise (like a curtain effect-shimmering of vertical lines), press the <sup>▲</sup> or <sup>▼</sup> keys to select **Pixel Clock** and press the **ENTER** key. Then press the <sup>▲</sup> or <sup>▼</sup> keys to adjust the monitor until the noise disappears.
- 6. If you notice a horizontal noise, press the ▲ or ▼ keys to select **Phase** and press the **ENTER** key. Then press the ▲ or ▼ keys adjust the monitor until the noise disappears.

# 8. How to adjust your monitor

### The control panel

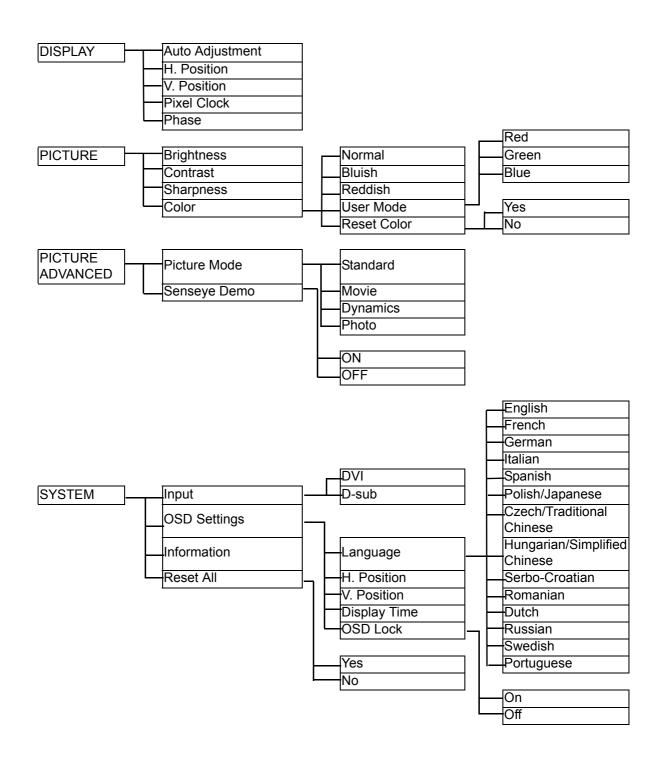


- 1. "Power": Turn the power on or off.
- 2. "ENTER" key: Enter sub menus and select items.
- 3. (Up) key: For Up/Increase adjustment. The key is also the hot key for **Brightness**.
- 4. (Down) key: For Down/Decrease adjustment. The key is also the hot key for **Contrast**.
- 5. "MENU" key: Activate OSD main menu and return to the previous menu or exit OSD.
- 6. "Mode" key: Switch between different modes, including **Standard**, **Movie**, **Dynamics**, and **Photo**.
- 7. "Input" key: Manually switch the input signal between D-Sub and DVI.
- 8. "*i*key": Adjust vertical position, phase, horizontal position and pixel clock automatically.

The hot-keys will display a graduated scale for adjusting the value of that setting, and will only operate while the OSD menu is not currently displaying. Hot-key displays will disappear after a few seconds of no key activity. See **Hot key mode on page 26**.

 $<sup>\</sup>mathbf{\hat{P}}$  OSD = On Screen Display.

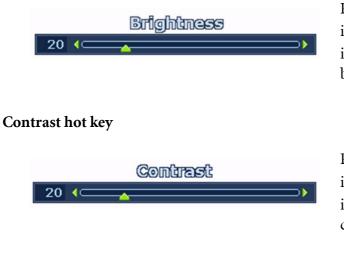
### On Screen Display (OSD) menu structure



### Hot key mode

The monitor keys perform as hotkeys to provide direct access to particular functions whenever the menu isn't currently displaying on-screen.

### Brightness hot key



Press the  $\uparrow$  key to display the **Brightness** indicator. Further press the  $\uparrow$  key to increase or the  $\checkmark$  key to decrease the screen brightness, and press the **MENU** key to exit.

Press the  $\checkmark$  key to display the **Contrast** indicator. Further press the  $\land$  key to increase or the  $\checkmark$  key to decrease the screen contrast, and press the **MENU** key to exit.

### Mode hot key



Press the key continually to switch between the 4 modes for the main window, including **Standard, Movie, Dynamics**, and **Photo**. The setting will take effect immediately. See also **Picture Mode on page 32**.

### Input hot key



Press the **Input** key to toggle between different PC video signal inputs that may be connected to your monitor. The setting will take effect immediately. See also **Input on page 33**.

### Main menu mode

You can use the OSD (On Screen Display) menu to adjust all the settings on your monitor. Press the **MENU** key to display the following main OSD menu.



There are four main OSD menus:

- 1. Display
- 2. Picture
- 3. Picture Advanced
- 4. System

Use the ▲ (Up) or ▼ (Down) keys to highlight a menu item, and press the ENTER key to enter the Menu item settings.

There are 14 different menu languages, see "Language on page 33" under "OSD Settings" for more details.

For more information on each menu, please refer to the following pages:

- Display menu on page 28
- Picture menu on page 30
- Picture Advanced menu on page 32
- System menu on page 33

### Display menu

DISPLAY		MODE: Standard
Auto Adjustment		
H. Position	10	
V. Position	12	
Pixel Clock	1	
Phase	12	

- 1. Press the **MENU** key to display the main menu.
- Press the ▲ or ▼ keys to select DISPLAY and then press the ENTER key to enter the menu.
- Press the ▲ or ▼ keys to move the highlight to a menu item and then press the ENTER key to select that item.
- Press the ▲ or ▼ keys to make adjustments or selections.
- 5. To return to the previous menu, press the **MENU** button.

Item	Function	Operation	Range
Auto	Optimizes and adjusts the	Press the ENTER key to	
Adjustment	screen settings	select this option and make	
	automatically for you. The	adjustment.	
	<i>i</i> key is a 'hot-key' for this		
	function.		
	When you connect a digital video output using a digital (DVI) cable to your monitor, the <i>i</i> key and the <b>Auto Adjustment</b> function will be disabled.		

			0 / 100
H. Position	Adjusts the horizontal		0 to 100
	position of the screen		
	image.		
V. Position	Adjusts the vertical		0 to 100
	position of the screen		
	image.		
Pixel Clock	Adjusts the pixel clock		0 to 100
	frequency timing to		
	synchronize with the		
	analog input video signal.		
	Not applicable to a digital		
	input signal.	Press the $\frown$ or $\checkmark$ keys to	
		adjust the value.	
	See also: Picture		
	optimization on page 23		
Phase	Adjusts the pixel clock		0 to 63
	phase timing to		
	synchronize with the		
	analog input video signal.		
	Not applicable to a digital		
	input signal.		
	See also: Picture		
	optimization on page 23		

### Picture menu

PICTURE		MODE: Standard
Brightness	12	
Contrast	10	
Sharpness	1	
Color		

- 1. Press the **MENU** key to display the main menu.
- 2. Press the ▲ or ▼ keys to select **PICTURE** and then press the **ENTER** key to enter the menu.
- Press the ▲ or ▼ keys to move the highlight to a menu item and then press the ENTER key to select that item.
- Press the ▲ or ▼ keys to make adjustments or selections.
- 5. To return to the previous menu, press the **MENU** button.

Item	Function	Operation	Range
Brightness	Adjusts the balance between light and dark shades.	Press the ▲ key to increase the brightness and press the ▲ key to decrease the brightness.	0 to 100
Contrast	Adjusts the degree of difference between darkness and lightness.	Press the ▲ key to increase the contrast and press the ▲ key to decrease the contrast.	0 to 100
Sharpness	Adjusts the clarity and visibility of the edges of the subjects in the image.	Press the ▲ key to improve the crispness of the display and press the ▼ key to have softness effect on the display.	1 to 5
Color - Press EN	<b>VTER</b> to enter the <b>Color</b> menu	1.	
Normal	Allows video and still photographs to be viewed with natural coloring. This is the factory default color.		
Bluish	Applies a cool tint to the image and is factory pre-set to the PC industry standard white color.	Press the $\checkmark$ or $\checkmark$ keys to select this option.	
Reddish	Applies a warm tint to the image and is factory pre-set to the news print standard white color.		

User Mode	Tailors the image color tint. The blend of the Red, Green and Blue primary colors can be altered to change the color tint of the image. The default start setting is 50. Decreasing one or more of the colors will reduce their respective influence on the color tint of the image. e.g. if you reduce the Blue level the image will gradually take on a yellowish tint. If you reduce Green, the image will become a magenta tint.	Press the ▲ or ▼ keys and the ENTER key to select Red, Green, or Blue. Then use the ▲ or ▼ keys to make the color adjustments.	<ul> <li>Red (0 to 100)</li> <li>Green (0 to 100)</li> <li>Blue (0 to 100)</li> </ul>
Reset Color	Resets the <b>User Mode</b> custom color settings to the factory defaults.	Press the $\checkmark$ or $\checkmark$ keys to adjust the value.	• Yes • No

### Picture Advanced menu

PICTURE ADVANCED	MODE: Standard
Picture Mode	Standard
Senseye Demo	ON
(A)(V) Move (ENTER) Ad	iust (MENU) Back

- 1. Press the **MENU** key to display the main menu.
- Press the ▲ or ▼ keys to select PICTURE ADVANCED and then press the ENTER key to enter the menu.
- Press the ▲ or ▼ keys to move the highlight to a menu item and then press the ENTER key to select that item.
- Press the ▲ or ▼ keys to make adjustments or selections.
- 5. To return to the previous menu, press the **MENU** key.

Item	Function	Operation	Range
Picture Mode	<ul> <li>Selects a picture mode that best suits the type of images shown on the screen.</li> <li>Standard - for basic PC application.</li> <li>Movie - for viewing videos.</li> <li>Dynamics - for viewing landscape-specific videos and playing games.</li> </ul>	Press the ▲ or ▼ keys to change the settings.	<ul> <li>Standard</li> <li>Movie</li> <li>Dynamics</li> <li>Photo</li> </ul>
	• Photo - for viewing still images		
Senseye Demo	Displays the preview of screen images under the selected mode from <b>Picture Mode</b> . The screen will be divided into two windows; the left window demonstrates images of Standard mode, while the right window presents the images under the specified mode.	Press the ▲ or ▼ keys to change the settings.	• ON • OFF

### System menu

SYSTEM		MODE: Stan	dard
Input	4	DVI	Þ
OSD Settings			
Information			
Reset All			_
(A) V Move	-	(MENU) E	Back

- 1. Press the **MENU** key to display the main menu.
- Press the ▲ or ▼ keys to select SYSTEM and then press the ENTER key to enter the menu.
- Press the ▲ or ▼ keys to move the highlight to a menu item and then press the ENTER key to select that item.
- Press the ▲ or ▼ keys to make adjustments or selections.
- 5. To return to the previous menu, press the **MENU** button.

Item	Function	Operation	Range
Input	Selects the D-sub (analog) or DVI (digital) input. Use this to change the input to that appropriate to your video cable connection type.	Press the ▲ or ▼ keys to adjust the value.	• DVI • D-sub
OSD Settings - I	Press ENTER to enter the OSE	) Settings menu.	
Language	Sets the OSD menu language.	Press the ▲ or ▼ keys to adjust the value. The language options displayed on your OSD may differ from those shown on the right, depending on the product supplied in your region.	<ul> <li>English</li> <li>French</li> <li>German</li> <li>Italian</li> <li>Spanish</li> <li>Polish/ Japanese</li> <li>Czech/ Traditional Chinese</li> <li>Hungarian/ Simplified Chinese</li> <li>Serbo-Croatian</li> <li>Romanian</li> <li>Dutch</li> <li>Russian</li> <li>Swedish</li> </ul>
			Portuguese

		0 to 100
position of the OSD menu.		
Adjusts the vertical		0 to 100
position of the OSD menu.		
Adjusts the display time of	Press the $\blacktriangle$ or $\checkmark$ keys to	• 5 sec.
the OSD menu.	•	• 10 sec.
		• 15 sec.
		• 20 sec.
		• 25 sec.
		• 30 sec.
Prevents all the monitor	Press the $\checkmark$ or $\checkmark$ keys to	• ON
settings from being	adjust the value.	• OFF
When this function is activated, the OSD controls and hotkey operations will be disabled.	To unlock the OSD controls when the OSD is preset to be locked, press and hold the 'MENU' button for 15 seconds to enter the 'OSD Lock' option and make changes.	
leave the OSD Settings menu.		1
Displays the current monitor property settings.	Press the <b>ENTER</b> key to select this option.	
Resets all mode, color and	Press the $\checkmark$ or $\checkmark$ keys to	• Yes
geometry settings to the factory default values.	adjust the value.	• No
	<ul> <li>position of the OSD menu.</li> <li>Adjusts the display time of the OSD menu.</li> <li>Prevents all the monitor settings from being accidentally changed.</li> <li>When this function is activated, the OSD controls and hotkey operations will be disabled.</li> <li>eave the OSD Settings menu.</li> <li>Displays the current monitor property settings.</li> <li>Resets all mode, color and geometry settings to the</li> </ul>	position of the OSD menu.Adjusts the vertical position of the OSD menu.Adjusts the display time of the OSD menu.Press the display time of the OSD menu.Prevents all the monitor settings from being accidentally changed.Prevents all the monitor settings from being accidentally changed.When this function is activated, the OSD controls and hotkey operations will be disabled.Pisplays the current monitor property settings.Pisplays the current monitor property settings.Resets all mode, color and geometry settings to thePress the <b>^</b> or <b>*</b> keys to adjust the value.Press the <b>OSD Settings</b> menu.

# 9. Troubleshooting

### Frequently asked questions (FAQ)

⑦ The image is blurred:

Read the How to adjust the screen resolution on page 21 section, and then select the correct resolution, refresh rate and make adjustments based on these instructions.

How do you use a VGA extension cable?

Remove the extension cable for the test. Is the image now in focus? If not, optimize the image by working through the instructions in the **How to adjust the screen refresh rate on page 22** section It is normal for blurring to occur due to conduction losses in extension cables. You can minimize these losses by using an extension cable with better conduction quality or with a built-in booster.

- C Does the blurring only occur at resolutions lower than the native (maximum) resolution? Read the **How to adjust the screen resolution on page 21** section. Select the native resolution.
- ? Pixel errors can be seen:
- C One of several pixels is permanently black, one or more pixels are permanently white, one or more pixels are permanently red, green, blue or another color.
  - Clean the LCD screen.
  - Cycle power on-off.
  - These are pixels that are permanently on or off and is a natural defect that occurs in LCD technology.
- ⑦ The image has a faulty coloration:
- It has a yellow, blue or pink appearance.

Select MENU > PICTURE > Color > Reset Color, and then choose "Yes" in the "Caution" message box to reset the color settings to the factory defaults.

If the image is still not correct and the OSD also has faulty coloration, this means one of the three primary colors is missing in the signal input. Now check the signal cable connectors. If any pin is bent or broken off, please contact your dealer to get necessary support.

⑦ No image can be seen:

Is the prompt on the display illuminated in green?

If the LED is illuminated in green and there is a message "Out of Range" on the screen, this means you are using a display mode that this monitor does not support, please change the setting to one of the supported mode. Please read "**Supported PC Timings on page 37**" section. Recommended mode is 1680 x 1050 @ 60Hz.

⑦ Is the prompt on the display illuminated in orange?

If the LED is illuminated in orange, the power management mode is active. Press any button on the computer keyboard or move the mouse. If that does not help, check the signal cable connectors. If any pin is bent or broken off, please contact your dealer to get necessary support.

Is the prompt on the display not illuminated at all?

Check the power supply mains socket, the external power supply and the mains switch.

- ⑦ The image is distorted, flashes or flickers:
- Read the **How to adjust the screen resolution on page 21** section and then select the correct resolution, refresh rate and make adjustments based on these instructions.
- ⑦ The image is displaced in one direction:
- Read the **How to adjust the screen resolution on page 21** section and then select the correct resolution, refresh rate and make adjustments based on these instructions.

### Need more help?

If your problems remain after checking this manual, please contact your place of purchase or e-mail us at: Support@BenQ.com

# 10. Supported PC Timings

	Incoming display mode (Input timing)				
Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Frequency (MHz)	Comment	
640x350	31.47	70.08	25.17	DOS	
720x400	31.47	70.08	28.32	DOS	
640x480	31.47	60.00	25.18	DOS	
640x480	35.00	67.00	30.24	Macintosh	
640x480	37.86	72.80	31.50	VESA	
640x480	37.50	75.00	31.50	VESA	
800x600	37.88	60.32	40.00	VESA	
800x600	48.08	72.19	50.00	VESA	
800x600	46.86	75.00	49.50	VESA	
832x624	49.72	74.55	57.29	Macintosh	
1024x768	48.36	60.00	65.00	VESA	
1024x768	56.48	70.10	75.00	VESA	
1024x768	60.02	75.00	78.75	VESA	
1024x768	60.24	74.93	80.00	Macintosh	
1152x864	67.50	75.00	108.00	VESA	
1152x870	68.68	75.06	100.00	Macintosh	
1152x900	61.80	66.00	94.50	SUN 66	
1152x900	71.81	76.14	108.00	SUN	
1280x1024	64.00	60.00	108.00	VESA	
1280x1024	75.83	71.53	128.00	IBMI	
1280x1024	80.00	75.00	135.00	VESA	
1280x1024	81.18	76.16	135.09	SPARC2	
1680x1050	75.00	60.00	162.00	VESA	

- Image disruption may occur as a result of signal frequency differences from graphic cards which do not correspond with the usual standard. This is not, however, an error. You may improve this situation by altering an automatic setting or by manually changing the phase setting and the pixel frequency from the "Display" menu.
- To extend the service life of the product, we recommend that you use your computer's power management function.

# 11. Specifications

Model	FP222W		
Display type	22.0", active, TFT		
Viewable diagonal	558.68 mm		
Native (maximum) resolution	1,680 x 1,050		
Colors	16.7 million		
Contrast / Brightness	700:1 / 300 cd/m <sup>2</sup>		
Response time	5 ms		
Viewing angle (left/right, up/down)	170, 160 (CR <u>&gt;</u> 10)		
Line frequency	30 - 82 kHz Multi- frequency monitor		
Image frequency	56 - 76 Hz modes within these parameters		
Image diagnostics	Digital, OSD Technology, <i>i</i> key (automatic image setting)		
Controls	7 buttons and <i>i</i> key.		
Functions	Contrast, brightness, vert. & hor. image position, phase, pixel clock, color balance, color palette, picture mode, Senseye demo, multiple-language OSD, OSD position, OSD lock, input selection		
Power management	VESA DPMS, EPA		
Max. power consumption	<u>&lt;</u> 49 Watt		
Standby power consumption	<u>&lt;</u> 1 Watt, 120 V		
	<u>&lt;</u> 2 Watt, 240 V		
	This product comply with ENERGY STAR® Program Requirements Computer Monitors. Version 4.0		
Input signal			
PC	RGB analog 0.7 Vpp/75 Ohm positive		
	Digital: DVI-D (optional)		
Synchronization	TTL separate signal connection 15-pin mini D-sub cable		
Temperature (operating)	0 °C - 40 °C		
Air humidity (operating)	10% - 90%		
Certifications	TCO 03, TÜV/Ergonomics, TÜV/GS, FCC Class B, ISO 13406-2, VCCI, CB Report, CE, C-Tick, BSMI, Fimko, GOST, CSA, CCC, MIC		

Operating voltage	Automatic switched mode power supply,	
	100-240 V, 50-60 Hz	
Dimensions (H x W x D)	422.45 x 518.26 x 169.57 mm	
Weight	5.8 kg	